

# Statistical Brief



State Center for Health Statistics

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## Racial Disparities in Birth Outcomes Increase with Maternal Age: Recent Data from North Carolina

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### Introduction

There are longstanding disparities in birth outcomes between whites and African Americans in North Carolina and the United States. For infant mortality and low birth weight, African Americans have rates at least two times those for whites, and the gap has been increasing over time. Arline Geronimus has proposed a "weathering hypothesis" to help explain this pattern.<sup>1,2</sup> The weathering hypothesis proposes that the health of African American women may begin to deteriorate in early adulthood as a physical consequence of cumulative socioeconomic disadvantage. As a result, the racial differential in infant mortality, for example, is larger at older maternal ages than at younger ages. A conclusion from this is that improvements in health among adult African American women would help reduce their infant mortality rate. This report examines recent North Carolina data to see if this hypothesis is supported.

### Methods

We looked at 1999-2003 rates of low birth weight (<2,500 grams), very low

birth weight (<1,500 grams), infant mortality (deaths in the first year of life), neonatal mortality (deaths in the first 27 days), and postneonatal mortality (deaths from 28-364 days of age) for African Americans and whites (non-Hispanic) for the following maternal age categories: 15-19, 20-34, and 35+. We also present selected 2001-2003 health indicators from the North Carolina Behavioral Risk Factor Surveillance System (BRFSS) for African American and white (non-Hispanic) women for ages 18-24, 25-34, and 35-44. The BRFSS is an ongoing random telephone health survey of adults in North Carolina.

Several years of vital records and BRFSS data were aggregated to yield large enough numbers for meaningful analyses by race and age. The 15-19 year-old age group was used for the birth and infant death data because this is a grouping commonly used for analysis of teen birth statistics; there are very few births to girls under age 15. The BRFSS survey interviews only persons ages 18 and older; the 18-24 year-old age group was used to define young adults.

### Results

Table 1 shows the distribution of live births in North Carolina during the period 1999-2003 for African Americans and whites, by maternal age. Twenty-eight percent of all live births shown in Table 1 were to African Americans, while 44 percent of the teen births (ages 15-19) were to African Americans. Table 1 reveals that teens comprised 18.7 percent of African American births, compared to 9.2 percent of white births.

**Table 1: 1999-2003 North Carolina resident live births by maternal race and age**

Age group	African American Number	African American Percent	White Number	White Percent
15-19	26,065	18.7	32,659	9.2
20-34	101,249	72.8	276,536	77.6
35+	11,783	8.5	47,259	13.2



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